IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Serial No.:	09/688,983	Confirmation No.:	2397
Applicant:	Jeff S. Eder		
Filed:	October 17, 2000		
Examiner:	Harish T. Dass		
Art Unit:	3628		
Docket No.:	AR - 12		
Customer No:	53787		

Brief on Appeal

Sir or Madam:

Real party in interest

Asset Reliance, Inc.

Related appeals

An appeal for cross referenced U.S. Patent Application 10/012,374 filed December 12, 2001 may be affected by or have a bearing on this appeal.

Status of Claims

Claims 157 - 181 and claims 201 - 213 are the subject of this appeal. Claim 214 is new. Claims 1 - 156 are cancelled without prejudice and claims 182 – 200 are withdrawn.

Status of Amendments

An Amendment/Reply After Final Rejection filed concurrently with this brief on May 5, 2006 has been entered.

Summary of Invention

One embodiment of an automated system for measuring, managing and transferring risk according to the present invention is best depicted in Figure 1 of the specification. This system for measuring, managing and transferring risk works in conjunction with the invention disclosed in cross-referenced U.S. patent application 10/329,172 to complete a series of inter-related functions. The inter-related functions performed by the system are:

1. preparing data from a plurality of management systems and external sources for use in processing,
2. analyzing the prepared data as required to identify value drivers, market value factors and develop models of enterprise market value by subset of value,
3. developing scenarios for the likely evolution of value drivers and market value factors for a normal, extreme and combined normal extreme scenarios,
4. simulating future financial performance of the enterprise by combining the models from step 2 with the scenarios of step 3 as required to measure expected risk under each scenario,
5. analyzing the expected risk information with risk transfer pricing information, risk control activity variables and information on available capital in order to determine an optimal set of risk transfer transactions and risk management activities for a specified financial goal, and
6. optionally, completing one or more risk transfer transactions in an automated fashion. These transactions may be completed using the system described in cross referenced application 10/329,172.

In short, the claimed invention automates the measurement of risk, the optimization of risk management activities and the completion of risk transfer transactions for a commercial enterprise.

Issues

Issues are whether claims 157 through 181 and 201 through 213 are patentable:

1) under 35 U.S.C. §112 given an alleged inadequacy of the written description contained in the specification, and
2) under 35 U.S.C. §101 given an alleged lack of utility.

Grouping of Claims

For each ground of rejection which Appellant contests herein which applies to more than one claim, such additional claims, to the extent separately identified and argued below, do not stand and fall together.

The Argument

Prior to discussing the rejections appearing below as Issue 1 and Issue 2, the Appellant would first like to bring to the Board's attention the fact that the 9 March 2006 Office Action used to support the rejection of the claims at issue is notable primarily for the complete lack of evidence that could be used to support any of the assertions made by the Examiner. The Appellant believes that substantial evidence is required to support all findings by the PTO and that the complete lack of evidence in the 9 March 2006 Office Action renders the Examiner's arguments moot.

Issue 1 - whether claims 157 through 181 and 201 through 213 are patentable under U.S.C. § 112

Claims 157 – 181 and 201 - 213 are rejected under 35 U.S.C. §112 as being unpatentable because the Examiner has alleged that the specification does not explain:

1) how to measure a plurality of risks;
2) identifying one or more risk management activities based upon said risks;
3) calculating an amount of capital available for said risk management activities;
4) how optimization is done;
5) how market value is computed;

6) quantification under scenarios including what is normal and extreme, is it arbitrary assumption of historical risk versus an impact of unforeseen event, how is it quantified;
7) where learning is explained; and/or
8) how enterprise value and risk is quantified.

The Appellant will respectfully traverses these §112 first paragraph rejections in four ways. First, by noting that the Office Action has failed to establish a prima facie case that the specification does not meet the requirements of §112 first paragraph. Second, by noting that the assertions regarding the alleged lack of written description are not in compliance with the substantial evidence standard of the Administrative Procedures Act and are therefore moot. The third way is by noting that the 9 March 2006 Office Action provides evidence that the claims and specification have not been reviewed by those of average skill in the relevant technologies. The fourth and final way is by noting that the specification and drawings clearly explain how to make and use the claimed invention.

A declaration under Rule 132 that supports the fourth statement has also been included for consideration by the Board. A declaration was not provided previously because the Examiner has not been able to establish a prima facie case that the instant application lacked written description and as a result no rebuttal was/is required. While this is still true, a declaration has been provided in an effort to expedite the prosecution of the instant application.

As mentioned previously, the Examiner has failed to establish a prima facie case that the specification does meet the requirements of §112 first paragraph. As detailed below, the Examiner has failed to establish a prima facie case that the specification does not meet the requirements of §112 first paragraph in a number of ways. MPEP 2163 states that:

> "in rejecting a claim (under §112 first paragraph), the Examiner must set forth express findings of fact regarding the above analysis which support the lack of written description conclusion. These findings should:
>
> (A) Identify the claim limitation at issue; and
>
> (B) Establish a *prima facie* case by providing reasons why a person skilled in the art at the time the application was filed would not have recognized that the

> inventor was in possession of the invention as claimed in view of the disclosure of the application as filed. A general allegation of "unpredictability in the art" is not a sufficient reason to support a rejection for lack of adequate written description."

The first way the 9 March 2006 Office Action fails to establish the prima facie case required to sustain a §112 first paragraph rejection is that the Examiner has not identified any reasons why a person skilled in the art at the time the application was filed would not have recognized that the inventor was in possession of the invention as claimed.

Another requirement for establishing a prima facie case that the specification does not meet the requirements of §112 first paragraph is that the alleged lack of enablement should produce a need for undue experimentation. The second way the 9 March 2006 Office Action fails to establish a prima facie case that the specification does not meet the requirements of §112 first paragraph is that the Office Action gives no indication that any experimentation would be required to produce the claimed results. The Appellant notes that there are still a number of other ways in which the failure to produce a prima facie case that the specification does not meet the requirements of §112 first paragraph can be documented.

As noted previously, the second way the Appellant will respectfully traverse the §112 rejections of claims 157 – 181 and 201 – 213 is by noting that the assertions regarding the alleged lack of enablement are not in compliance with the requirements of substantial evidence test defined by the Administrative Procedures Act and are therefore moot. In Dickinson v. Zurko, 119 S. Ct. 1816, 50 USPQ2d 1930 (1999), the Supreme Court held that the appropriate standard of review of PTO findings are the standards set forth in the Administrative Procedure Act ("APA") at 5 U.S.C. 706 (1994). The APA provides two standards for review – an arbitrary and capricious standard and a substantial evidence standard. The Supreme Court has defined substantial evidence as shown below:

> Substantial evidence is more than a mere scintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion. . . . Mere uncorroborated hearsay or rumor does not constitute substantial evidence. Consolidated, 305 U.S. at 229-30 (citations omitted)

The Appellant respectfully submits that the 9 March 2006 Office Action fails to

provide even a scintilla of evidence to support the allegation that the specification does not meet the requirements of §112 first paragraph and that as a result it fails to meet the substantial evidence standard. The First Federal Circuit determined that the substantial evidence standard was the appropriate standard for any review of PTO findings (In re Gartside 203F.3d 1305, 53 U.S.PQ2d 1769 (Fed Circuit 2000)).

As noted previously, the third way the Appellant will respectfully traverse the §112 rejections of claims 157 – 181 and 201 – 213 is by noting that the questions included in 9 March 2006 Office Action provides substantial evidence that the assessment regarding the alleged lack of enablement was not based on a review of the specification and claims by one or more individuals possessing ordinary skill in the pertinent technologies. It is well established that the specification should provide a written description for those of average skill in the relevant arts and that without any apparent input from an individual or individuals with the required background the Examiner appears to lack a reasonable basis for rejecting any claim under §112 first paragraph.

As noted previously, the fourth way the Appellant will respectfully traverse the §112 rejections of claims 157 – 181 and 201 – 213 is by noting that the written specification and drawings describe the subject matter defined by each of the rejected claims and that they enable any person skilled in the relevant arts to make and use the subject matter defined in the rejected claims. As noted previously, these assertions are completely supported by the declaration under Rule 132 that has been provided as part of this response. The table shown below summarizes the support in the written specification and drawings for each of the areas of alleged inadequacy identified by the Examiner.

Area of alleged deficiency	Support in specification includes:
1. How to measure a plurality of risks	Contingent liability values are obtained from an advanced finance system (see second paragraph after Table 4). The specification also describes how to calculate contingent liability values using real option algorithms (see the paragraphs between Tables 29 and 33, the first two paragraphs after Table 33 and FIG. 6B). See item 8b, for the remainder of the discussion about measuring a plurality of risks.
2. Identifying one or more risk management activities based upon said risks;	Data is integrated in accordance with a common metadata using metadata mapping as described in FIG. 5A - E and the System Setting/Databot section. The integrated data includes external data that identifies potential risk transfer transactions and internal data that is used to identify risk reduction activities. It is straightforward to match an activity or risk transfer to a specific risk once the risks are quantified in accordance with the common metadata.
3. Calculating an amount of capital available for said risk management activities	Integrated data from the basic and advanced finance systems identifies the expected amount of capital available at any time period. This information is combined with user input to the system settings (Table 15) to identify the amount of capital available for risk management for any time period.
4. How optimization is done	As described in second paragraph after Table 51, the system uses a linear programming model to complete optimization analyses using previously developed information/models. Multi criteria optimization is mentioned in the same paragraph and detailed in cross referenced patent 5,615,109. Other optimization models are detailed in other cross referenced applications and patents.
5. How market value is computed	As shown in Table 2, the current market value of equity securities are obtained in a manner that is well known. This total is combined with the value of outstanding debt to calculate market value.
6. Quantification under scenarios ..., how is it quantified;	Scenarios for the evolution of causal value drivers and market value factors are developed in accordance with the procedure outlined in the first 13 paragraphs of the risk reduction bots section and FIG. 7.
7. Where learning is explained	A number of different types of learning are clearly described in the analysis bots section and FIG. 6A – 6C.
8a. How enterprise value is quantified	Value is quantified using the procedure described in the analysis bots section and FIG. 6A – 6C. Value contributions for elements of value, sub-elements of value and market value factors are quantified for the subsets of value: current operation, real option and market sentiment as appropriate.
8b. How enterprise risk is quantified	The quantification of the remaining risks are described in the first 16 paragraphs of the risk reduction bots section and FIG. 7.

Additional support for each of the areas of alleged deficiency can also be found in one or more cross referenced U.S. Patent Applications and/or Patents.

Issue 2 - whether claims 157 through 181 and 201 through 213 are patentable under U.S.C. § 101

Claims 157 – 181 and 201 - 213 are rejected under 35 U.S.C. § 101 as being unpatentable because the Examiner alleged that the disclosed invention is inoperative and therefore lacks patentable utility. More specifically the reason that the invention is allegedly inoperative is that "the claims are directed to measuring risk using quantifying risks which includes such elements as brand, customer relationship, employee relationship, alliance, etc which are not quantifiable".

The Appellant will respectfully traverse the § 101 rejections in three ways. First, by noting that the Examiner has failed to establish a prima facie case of non utility. Second, by noting that the assertions regarding the alleged lack of utility are not in compliance with the requirements of the Administrative Procedures Act and are therefore moot. Third, by noting that most of the rejected claims are not affected by alleged basis for a lack of patentable utility

As mentioned previously, the Examiner has failed to establish a prima facie case of non utility for the rejected claims. MPEP 2164.07 states "the examiner has the initial burden of challenging an asserted utility. Only after the examiner has provided evidence showing that one of ordinary skill in the art would reasonably doubt the asserted utility does the burden shift to the applicant to provide rebuttal evidence sufficient to convince one of ordinary skill in the art of the invention's asserted utility. In re Brana, 51 F.3d 1560, 1566, 34 USPQ2d 1436, 1441 (Fed. Cir. 1995) (citing In re Bundy, 642 F.2d 430, 433, 209 USPQ 48, 51 (CCPA 1981)). The Appellant respectfully submits that the Examiner has not provided any evidence to support his assertions. Instead, he has simply made an arbitrary and capricious statement and asked four questions. The tables below identify some of the missing evidence associated with assertion of non utility.

Office Action Question	Missing evidence includes:
1) How a brand, employee relation, alliance, etc. is quantified (when they allegedly can't be quantified)?	1) evidence that the quantification of brands, employee relations, alliances, etc. is something that those of average skill in the art would doubt, 2) evidence that the quantification of brands, employee relations, alliances, etc. using the specified method and/or system is something that those of average skill in the art would doubt, and 3) evidence that quantification of a brand, employee relation, alliance, etc. is required for the operation of the claimed invention
2) Who knew that GE brand will do better business than another company?	1) evidence that knowing that GE brand will do better business than another company is something that those of average skill in the art would doubt; 2) evidence that knowing that GE brand will do better business than another company using the specified method and/or system is something that those of average skill in the art would doubt; and 3) evidence that knowing that GE brand will do better business than another company is required for the operation of the claimed invention
3) (Who knew) Google stocks will shoot to $300?	1) evidence that knowing Google stocks will shoot to $300 is something that those of average skill in the art would doubt; 2) evidence that knowing Google stocks will shoot to $300 using the specified method and/or system is something that those of average skill in the art would doubt; and 3) evidence that knowing that Google stocks will shoot to $300 is required for the operation of the claimed invention

Office Action Question	Missing evidence includes:
4) If so, is the quantifying these values (1, 2 and/or 3) are repeatable?	1) evidence that quantifying these values (1, 2 and/or 3) repeatably is something that those of average skill in the art would doubt, 2) evidence that quantifying these values (1, 2 and/or 3) repeatably using the specified method and/or system is something that those of average skill in the art would doubt, and 3) evidence that quantifying these values (1 – 3) repeatably is required for the operation of the claimed invention

As noted previously, the second way the Appellant will traverse the § 101 rejections of claims 157 – 181 and 201 – 213 is by noting that the assertions regarding the alleged lack of utility are not in compliance with the requirements of the Administrative Procedures Act and are therefore moot. In Dickinson v. Zurko, 119 S. Ct. 1816, 50 USPQ2d 1930 (1999), the Supreme Court held that the appropriate standard of review of PTO findings of fact are the standards set forth in the Administrative Procedure Act ("APA") at 5 U.S.C. 706 (1994). The APA provides two standards for review – an arbitrary and capricious standard and a substantial evidence standard. The Supreme Court has defined substantial evidence as shown below:

> Substantial evidence is more than a mere scintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion. . . . Mere uncorroborated hearsay or rumor does not constitute substantial evidence. Consolidated, 305 U.S. at 229-30 (citations omitted)

The Appellant respectfully submits that the 9 March 2006 Office Action fails to provide even a scintilla of evidence to support the allegation of non utility it contains and that as a result it fails to meet the substantial evidence standard. The First Federal Circuit determined that the substantial evidence standard was the appropriate standard for any review of PTO findings (In re Gartside 203F.3d 1305, 53 U.S.PQ2d 1769 (Fed Circuit 2000)).

The Appellant respectfully submits that the 9 March 2006 Office Action also fails to pass the arbitrary and capricious test. In the Gartside decision (In re Gartside 203F.3d 1305, 53 U.S.PQ2d 1769 (Fed Circuit 2000)) the First Federal Circuit discussed the arbitrary and capricious standard and noted:

> Because this standard is generally considered to be the most deferential of the APA standards of review, (see Stein et al., Administrative Law 51.03, at 51-117 (1999)) the reviewing court analyzes only whether a rational connection exists between the agency's fact findings and its ultimate action, (see Hyundai Elecs. Indus. Co. v. ITC, 899 F.2d 1204, 1209, 14 USPQ2d 1396, 1400 (Fed. Cir. 1990).

On June 8, 2005 the Examiner for the above referenced application rejected a set of pending claims for cross referenced U.S. Patent Application 10/329,172 under § 103 that were/are related to quantifying risk by element of value. On page 10 of the 8 June 2005 Office Action for cross referenced U.S. Patent Application 10/329,172 the Examiner stated:

> Garman discloses assets. Garman does not explicitly disclose where the elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, equipment, intellectual property, partnerships, processes, production equipment, supply chains, vendors, vendor relationships and combinations thereof ...(portion of text omitted by Appellant) However, King discloses these well-known steps as assets (under line added by Appellant)

In the response to the 8 June 2005 Office Action, the Applicant asserted that the Examiner had misrepresented the teachings of King and Garman. In the 2 December 2005 Office Action for cross referenced U.S. Patent Application 10/329,172 the Examiner stated that the Applicant needed to read the King and Garman references in their entirety. He also reaffirmed his interpretation of Garman and King by rejecting the same set of claims that related to quantifying risk by element of value. On page 8 of the 2 December 2005 Office Action for cross referenced U.S. Patent Application 10/329,172 the Examiner states:

> Garman discloses assets. Garman does not explicitly disclose where the elements of value are selected from the group consisting of alliances, brands, channels, customers, customer relationships, employees, equipment, intellectual property, partnerships, processes, production equipment, supply chains, vendors, vendor

relationships and combinations thereof ...(portion of text omitted by Appellant) However, King discloses these well-known steps as assets (under line added by Appellant)

As discussed above, the Examiner has rejected all the pending claims for the above referenced application on the basis of his unsupported statement that "the claims are directed to measuring risk using quantifying risks which includes such elements as brand, customer relationship, employee relationship, alliance, etc which are not quantifiable". The Appellant is understandably mystified by the sudden transformation of the quantification of risks associated with certain elements of value from a well known step to something which can not be done. Absent evidence of a dramatic development in asset valuation and/or risk analysis that supports the Examiner's complete reversal on this subject, the Appellant respectfully submits that the reasoning described above is not rational. As a result, the findings supported by this apparently irrational reasoning fail to meet the arbitrary and capricious test established by the Administrative Procedures Act and are therefore moot.

The third way the Assignee will traverse the § 101 rejections, at least in part, is by noting that most of the claims are not affected by the apparent basis for arbitrary and capricious assertion regarding a lack of patentable utility. In particular, claims 157 – 163, 165 – 168, 169 – 176, 178 – 181 and 207 – 213 are not affected by the arbitrary, capricious and unsubstantiated assertion made by the Examiner that the risk related to certain elements of value can not be quantified. Accordingly, the Assignee respectfully requests that the Examiner amend the rejection under § 101 to remove these claims. Removing the unwarranted rejection from most of the claims would leave 10 claims (164, 177, 200 - 206 and 214) as being rejected under § 101.

As part of the discussion related to the §101 rejections the Examiner also has expressed concern about how concrete the disclosed invention is. The basis for this concern appears to be the Examiner's incorrect assumption that the prices paid by individuals and/or companies that acquire a company in order to change its scale, scope and/or focus are somehow relevant to the claimed invention. A review of the specification shows that this is not the case and the basis for the Examiner's concern in this regard is a

mystery. This section of the 9 March 2006 Office Action also contained a request that examples of the calculations be provided. The Assignee notes that it is well established that it is irrelevant whether or not the specification contains illustrative examples (see In re Wright, 999 F 2d 1557, 27 USPQ 2d 1510 1513 Fed. Cir.) and that as a result no examples will be provided.

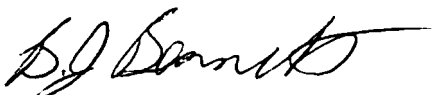
As noted above the 9 March 2006 Office Action has failed to establish a prima facie case of non-utility. As such, no rebuttal of the assertions made in the Office Action is required. However, the Assignee will note that there are several ways the assertion could be rebutted including:

a) citing the Examiner's own arguments made on at least two occasions in cross referenced application 10/329,172;
b) noting that the Examiner, Applicant, and the Assignee have each provided references that traverse all or part of the apparent basis for the arbitrary and capricious statement that the disclosed invention is inoperative and lacks utility; and
c) noting that the prosecution history of one or more cross referenced applications has provided further evidence that can be used to traverse all or part of the apparent basis for the arbitrary and capricious statement that the disclosed invention is inoperative and lacks utility.

Conclusion

For the extensive reasons advanced above, Appellant respectfully but forcefully contends that each claim is patentable. Therefore, reversal of all rejections is courteously solicited.

Respectfully submitted,



B.J. Bennett, President
Asset Reliance, Inc.
Dated: May 5, 2006

APPENDIX

157. (currently amended) A computer readable medium having sequences of instructions stored therein, which when executed cause the processor in a computer to perform a risk management optimization method, comprising:

preparing data from a plurality of enterprise transaction systems for use in processing;

measuring a plurality of risks using at least a portion of said data;

identifying one or more risk management activities based upon said risks;

calculating an amount of capital available for said risk management activities using user input and at least a portion of said data; and

determining a combination of risk management activities that optimizes aspects of enterprise financial performance selected from the group consisting of market value, risk and combinations thereof within a constraint of the available capital.

158. (previously presented) The computer readable medium of claim 157, wherein measuring a plurality of risks further comprises quantifying risks under scenarios selected from the group consisting of normal, extreme and combinations thereof.

159. (previously presented) The computer readable medium of claim 157 wherein a market value further comprises one or more categories of value selected from the group consisting of an current operation, real option, market sentiment and combinations thereof.

160. (previously presented) The computer readable medium of claim 157 wherein a risk management activity is selected from the group consisting of establishing one or more risk management control systems, completing one or more risk transfer transactions and combinations thereof.

161. (previously presented) The computer readable medium of claim 160, wherein establishing each of one or more risk management control systems further comprises identifying a risk reduction activity and optionally establishing a method for implementing said activity in an automated fashion.

162. (previously presented) The computer readable medium of claim 160, wherein

completing one or more risk transfer transactions further comprises completing activities selected from the group consisting of insurance purchases, derivate transactions, and combinations thereof.

163. (previously presented) The computer readable medium of claim 157, wherein identifying and measuring a plurality of risks further comprises:

developing a computational model of organization market value by category of value, element of value and external factor by completing a series of multivariate analyses in an automated fashion using at least a portion of the data, and

quantifying a plurality of risks by a category of value using said model, where a category of value is selected from the group consisting of current operation, real option, market sentiment and combinations thereof.

164. (previously presented) The computer readable medium of claim 163 wherein the method further comprises quantifying risk by element of value and external factor where the elements of value are selected from the group consisting of alliances, brands, customers, customer relationships, employees, employee relationships, infrastructure, intellectual property, information technology, partnerships, processes, production equipment, vendors, vendor relationships and combinations thereof.

165. (previously presented) The computer readable medium of claim 157 that further supports an optimization of aspects of financial performance selected from the group consisting of current operation value, real option value, market sentiment value and combinations thereof.

166. (previously presented) The computer readable medium of claim 157 where determining an optimal combination of risk management activities further comprises using a method selected from the group consisting of quasi Monte Carlo, genetic algorithm, multi-criteria optimization and linear programming.

167. (previously presented) The computer readable medium of claim 157 where the method further comprises:

using one or more shadow prices from a linear programming optimization calculation to identify an optimal budget for risk management activities.

168. (previously presented) The computer readable medium of claim 157 where preparing data from a plurality of enterprise transaction systems for use in processing further comprises:

using metadata mapping to convert, integrate and store a plurality of enterprise related data from a plurality of enterprise related systems in accordance with a metadata standard

where a metadata standard is selected from the group consisting of xml and metadata coalition specification and a metadata mapping table is used to support the integration, conversion and storage of data.

169. (currently amended) A risk management optimization system, comprising:

networked computers each with a processor having circuitry to execute instructions; a storage device available to each processor with sequences of instructions stored therein, which when executed cause the processors to:

prepare data from a plurality of enterprise transaction systems for use in processing;

measure a plurality of risks using at least a portion of said data;

identify one or more risk management activities based upon said risks;

calculate an amount of capital available for said risk management activities using user input and at least a portion of said data; and

determine a combination of risk management activities that optimizes aspects of enterprise financial performance selected from the group consisting of market value, risk and combinations thereof within one or more constraints of the available capital.

170. (previously presented) The system of claim 169, wherein measuring a plurality of risks further comprises quantifying risks under scenarios selected from the group consisting of normal, extreme and combinations thereof.

171. (previously presented) The system of claim 169 wherein a market value further comprises one or more categories of value selected from the group consisting of an

current operation, real option, market sentiment and combinations thereof.

172. (previously presented) The system of claim 169 wherein a risk management activity is selected from the group consisting of establishing one or more risk management control systems, completing one or more risk transfer transactions and combinations thereof.

173. (previously presented) The system of claim 172, wherein establishing each of one or more risk management control systems further comprises identifying a risk reduction activity and optionally establishing a method for implementing said activity in an automated fashion.

174. (previously presented) The system of claim 172, wherein completing one or more risk transfer transactions further comprises completing activities selected from the group consisting of insurance purchases, derivate transactions, and combinations thereof.

175. (previously presented) The system of claim 169, wherein identifying and measuring a plurality of risks further comprises:

developing a computational model of organization market value by category of value, element of value and external factor by completing a series of multivariate analyses in an automated fashion using composite applications and at least a portion of the data, and

quantifying a plurality of risks by a category of value using said model, where a category of value is selected from the group consisting of current operation, real option, market sentiment and combinations thereof.

176. (previously presented) The system of claim 175 wherein a series of multivariate analyses are selected from the group consisting of identifying one or more previously unknown item performance indicators, discovering one or more previously unknown value drivers, identifying one or more previously unknown relationships between one or more value drivers, identifying one or more previously unknown relationships between one or more elements of value, quantifying one or more inter-relationships between value drivers, quantifying one or more impacts between elements of value, developing one or more composite variables, developing one or more vectors, developing one or more causal

element impact summaries, identifying a best fit combination of predictive model algorithm and element impact summaries for modeling enterprise market value and each of the components of value, building predictive models using transaction data, determining a net element of value impact for each category of value, determining a relative strength of the elements of value between two or more enterprises, developing one or more real option discount rates, calculating one or more real option values, calculating an enterprise market sentiment value by element, developing a covariance matrix, developing a series of scenarios, simulating a financial performance under a given scenario and combinations thereof.

177. (previously presented) The system of claim 169 wherein the method further comprises quantifying risk by element of value and external factor where the elements of value are selected from the group consisting of alliances, brands, customers, customer relationships, employees, employee relationships, infrastructure, intellectual property, information technology, partnerships, processes, production equipment, vendors, vendor relationships and combinations thereof.

178. (previously presented) The system of claim 169 that further supports an optimization of aspects of financial performance selected from the group consisting of current operation value, real option value, market sentiment value and combinations thereof.

179. (previously presented) The system of claim 169 where determining an optimal combination of risk management activities further comprises using a method selected from the group consisting of quasi Monte Carlo, genetic algorithm, multi-criteria optimization and linear programming.

180. (previously presented) The system of claim 169 where the method further comprises:
using one or more shadow prices from a linear programming optimization calculation to identify an optimal budget for risk management activities.

181. (previously presented) The system of claim 169 where preparing data from a plurality of enterprise transaction systems for use in processing further comprises:

converting and storing a plurality of enterprise related data from a plurality of enterprise related systems in accordance with an xml or metadata coalition metadata standard.

182 – 200. (withdrawn).

201. (previously presented) An advanced management method, comprising:

aggregating and preparing data from a plurality of enterprise related systems for use in processing, and

learning from at least a portion of the data as required to quantify a tangible impact for a plurality of risks and one or more elements of value on one or more subsets of value selected from the group consisting of a category of value, a component of value and combinations thereof

where one or more elements of value are selected from the group consisting of alliances, brands, customers, customer relationships, employees, employee relationships, infrastructure, intellectual property, information technology, partnerships, processes, production equipment, vendors, vendor relationships and combinations thereof, and

where a plurality of risks are selected from the group consisting of event risks, contingent liabilities, volatility and combinations thereof.

202. (previously presented) The method of claim 201 wherein the method further comprises:

identifying one or more risk management activities based upon one or more quantified risks;

calculating an amount of capital available for said risk management activities using at least a portion of said data; and

determining a combination of risk management activities that optimizes aspects of enterprise financial performance selected from the group consisting of market value, risk and combinations thereof within a constraint of the available capital.

203. (previously presented) The method of claim 201 wherein aggregating and preparing data from a plurality of enterprise related systems for use in processing, further comprises

using metadata mapping to integrate and store data from said systems in accordance with a common schema.

204. (previously presented) The method of claim 201 wherein a category of value is selected from the group consisting of current operation, real option, market sentiment and combinations thereof and a component of value is selected from the group consisting of revenue, expense, capital and combinations thereof.

205. (previously presented) The method of claim 201, wherein quantifying a plurality of risks further comprises quantifying risks under scenarios selected from the group consisting of normal, extreme and combinations thereof.

206. (previously presented) The method of claim 208 wherein a risk management activity is selected from the group consisting of establishing one or more risk management control systems, completing one or more risk transfer transactions and combinations thereof.

207. (currently amended) A management analysis method, comprising:

aggregating and preparing data from a plurality of enterprise related systems for use in processing, and

analyzing at least a portion of the data as required to quantify an enterprise value and risk by one or more subsets of value selected from the group consisting of a category of value, a component of value, an element of value and combinations thereof

~~where an element of value is selected from the group consisting of alliances, brands, customers, customer relationships, employees, employee relationships, infrastructure, intellectual property, information technology, partnerships, processes, production equipment, vendors, vendor relationships and combinations thereof;~~

where an enterprise value further comprises a market value, and

where an enterprise risk further comprises a sum of a plurality of risks selected from the group consisting of event risks, contingent liabilities, volatility and combinations thereof.

208. (previously presented) The method of claim 207 wherein aggregating and preparing data from a plurality of enterprise related systems for use in processing, further comprises using metadata mapping to integrate, convert and store data from said systems in accordance with a common schema.

209. (previously presented) The method of claim 207 wherein the method further comprises:

identifying one or more risk management activities based upon one or more quantified risks;

calculating an amount of capital available for said risk management activities using at least a portion of said data; and

determining a combination of risk management activities that optimizes aspects of enterprise financial performance selected from the group consisting of market value, risk and combinations thereof within a constraint of the available capital.

210. (previously presented) The method of claim 207, wherein quantifying an impact for plurality of risks further comprises quantifying an impact for a plurality of risks under scenarios selected from the group consisting of normal, extreme and combinations thereof.

211. (previously presented) The method of claim 207 wherein a category of value is selected from the group consisting of current operation, real option, market sentiment and combinations thereof and a component of value is selected from the group consisting of revenue, expense, capital and combinations thereof.

212. (previously presented) The method of claim 214 wherein a risk management activity is selected from the group consisting of establishing one or more risk management control systems, completing one or more risk transfer transactions and combinations thereof.

213. (previously presented) The method of claim 212, wherein completing one or more risk transfer transactions further comprises completing activities selected from the group consisting of insurance purchases, derivate transactions and combinations thereof.

214. (new) The method of claim 207, wherein an element of value is selected from the group consisting of alliances, brands, customers, customer relationships, employees, employee relationships, infrastructure, intellectual property, information technology, partnerships, processes, production equipment, vendors, vendor relationships and combinations thereof.